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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,266

02/26/2004

Guy Hubert Culeron

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THE PROCTER & GAMBLE COMPANY  
Global Legal Department - IP  
Sycamore Building - 4th Floor  
299 East Sixth Street  
CINCINNATI, OH 45202

EXAMINER

DOUYON, LORNA M

ART UNIT

PAPER NUMBER

1796

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/787,266	<b>Applicant(s)</b> CULERON ET AL.	
	<b>Examiner</b> Lorna M. Douyon	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 and 11-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on April 15, 2009 has been entered.
2. Claims 1-8, 11-15 are pending.
3. For the record, the terminal disclaimer filed on September 13, 2005 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of copending Application No. **10/787,343** has been reviewed and is accepted. The terminal disclaimer has been recorded.
4. The rejection of claims 1-2, 11-12 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8 and 9 of U.S. Patent No. **7,402,554** is withdrawn in view of Applicants' amendment. However, please see a new rejection below.

***Specification***

5. The disclosure is objected to because of the following informalities: it is suggested that entire pages 15 and 16 of the substitute specification be replaced to include the amendment dated July 20, 2007, or May 30, 2008 because the line numberings of the amendment do not match with the current substitute specification.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-4, 6-8, 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Loth et al. (US Patent No. 5,075,026), hereinafter "Loth" in view of Pritchett et al. (US Patent No. 6,612,468), hereinafter "Pritchett".

Loth teaches an improved all-purpose liquid cleaner in the form of a dilute microemulsion composition containing 1% to 10% by weight of an anionic detergent, 2 to 10% by weight of cosurfactant, 0.4% to 10% by weight of perfume and the balance water, or a concentrated microemulsion composition (which read on protomicroemulsion) containing by weight, 18% to 65% of anionic and nonionic detergent, 2% to 30% of cosurfactant, 10% to 50% of perfume and the balance water which upon dilution with water will yield said dilute o/w microemulsion composition (see abstract; col. 1, lines 5-9). The dilute o/w microemulsion detergent cleaning

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compositions of the present invention may often include as much as about 0.2% to about 7% by weight, based on the total composition, of terpene solvents introduced thereinto via the perfume component (see col. 5, lines 15-21). In final form, the all-purpose liquids are clear oil-in-water microemulsions (see col. 13, lines 25-27), hence, the perfumes are non-visible droplets having diameters within those recited, and should have water solubility within those recited. The microemulsion is also construed to read on Newtonian fluids. The liquids are readily pourable and exhibit a viscosity in the range of 6 to 60 centipoises (equivalent to 0.06Pas) as measured at 25°C with a Brookfield RVT Viscometer using a #1 spindle rotating at 20 RPM (see col. 13, lines 31-36). When intended for use in the neat form, the liquid compositions can be packaged under pressure in an aerosol container or in a pump-type sprayer for the so-called spray-and-wipe type of application (see col. 13, lines 45-48). Loth, however, fails to disclose the liquid composition in a foam generating dispenser which includes a gas imparting mechanism to form the foam from air via an air injection piston, foam-generating aperture, an impinging surface, a mesh or net, a pump and a sprayer, wherein a mesh and/or sponge is located slightly within, and/or at the tip of the nozzle of said dispenser; and wherein the dispenser generates a foam having a foam to weight ratio greater than about 2 ml/g.

Pritchett discloses that over the last 15 years or so the use of foam dispensers based on aerosols using pressurized gas has declined steeply for environmental reasons, leading to the development of foaming dispensers which exploit a manual pumping action to blend air and liquid and create foam (see col. 1, lines 13-17), thus the

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invention of a foam dispenser as follows. Pritchett teaches a hand operated non-aerosol foam dispenser comprising a combined liquid pump and air pump for mounting at the top of a container of foamable liquid, the liquid pump having a liquid cylinder and a liquid piston defining between them a liquid chamber, the air pump having an air cylinder and an air piston defining between them an air chamber, and the liquid piston and air piston being reciprocable together in their respective cylinders by the action of a pump plunger which carries said pistons; an air inlet valve and liquid inlet valve being provided for the air chamber and liquid chamber respectively; an air discharge passage and a liquid discharge passage leading from the air chamber and the liquid chamber respectively, the air discharge passage and liquid discharge passage meeting one another for mixing the pumped air and liquid which passes to an outlet passage of the dispenser by way of a permeable foam regulation element; one or more vent openings being provided to admit air into a cap chamber and into the air chamber through the air inlet valve (see abstract; claims). The preferred foam-generating element uses one or more layers of mesh to produce a uniform foam for discharge (see col. 3, lines 40-46). Pritchett also teaches that the nozzle **12** communicates with an inner axial downwardly open tube **11** which forms a top foamer unit housing, and fitting closely in tube **11** is a cylindrical plastic tube **81** having ultrasonically welded across its open ends a disk of coarse nylon mesh **82** (bottom end) and fine nylon mesh **83** (top end), (see col. 7, lines 35-45 and Figure 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the liquid cleaner of Loth in the foam dispenser of

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Pritchett because the dispensers based on aerosols using pressurized gas is now replaced by foam dispensers for environmental reasons as taught by Pritchett, and to reasonably expect the foam to weight ratio to be within those recited because similar ingredients and dispensers have been utilized.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Loth and Pritchett as applied to the above claims, and further in view of Baeck et al. (US Patent No. 5,679,630), hereinafter "Baeck".

Loth and Pritchett teaches the features as described above. Loth and Pritchett, however, fail to disclose the incorporation of enzymes into the composition.

Baeck teaches protease enzymes having improved proteolytic activity, substrate specificity, stability and/or enhanced performance -(see col. 1, lines 53-58) which can be used in any detergent composition or concentrated detergent compositions where high sudsing and/or good insoluble substrate removal are desired (see col. 21, lines 1-12) such as in cleaning fabrics, cleaning dishes and for personal cleansing (see col. 2, lines 16-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate enzymes into the composition of Loth and Pritchett because this would provide improved proteolytic activity, substrate specificity, stability and/or enhanced performance as taught by Baeck.

9. Claims 1-8, 11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petri et al. (US Patent No. 6,114,298), hereinafter "Petri" in view of Pritchett et al. (US Patent No. 6,612,468), hereinafter "Pritchett".

Petri teaches a microemulsion suitable for disinfecting a surface (see col. 2, lines 48-49), such as dishes (see col. 14, line 59), comprising a surfactant, an aqueous phase comprising a bleach, and droplets dispersed in said aqueous phase, said droplets comprising an essential oil or an active thereof (see abstract; col. 2, lines 48-53). The aqueous phase of the microemulsions comprises at least water (see col. 8, lines 58-63) and may comprise as a preferred optional ingredient, a hydroxylated solvent (see col. 9, lines 51-53), such as glycol ethers (see col. 10, lines 1-25) and aliphatic alcohols such as ethanol (see col. 10, lines 45-53). The microemulsions may comprise as an optional ingredient, other solvents including terpene (see col. 11, lines 1-13), which terpene read on the "low water-soluble oil having a solubility in water of less than about 5000 ppm as required in claim 14. The microemulsion may further comprise a variety of other optional ingredients such as enzymes (see col. 11, lines 19-24). The microemulsion is also construed to read on Newtonian fluids. The microemulsions may be packaged in a variety of suitable detergent packaging known to those skilled in the art, for example, spray dispenser, preferably in a trigger spray dispenser or in a pump spray dispenser, and may include manually operated foam trigger-type dispensers (see col. 16, lines 23-44). Petri, however, fails to specifically disclose the microemulsion in a foam generating dispenser which includes a gas imparting mechanism to form the foam from air via an air injection piston, foam-



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generating aperture, an impinging surface, a mesh or net, a pump and a sprayer, wherein a mesh and/or sponge is located slightly within, and/or at the tip of the nozzle of said dispenser; and wherein the dispenser generates a foam having a foam to weight ratio greater than about 2 ml/g.

Pritchett teaches the features as described above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the microemulsion of Petri in the non-aerosol foam dispenser of Pritchett because Petri teaches in col. 6, lines 23-44 that the microemulsions may be packaged in a variety of suitable detergent packaging known to those skilled in the art, and Pritchett teaches such dispenser, and to reasonably expect the foam to weight ratio to be within those recited because similar ingredients and dispensers have been utilized.

10. Claims 1-8, 11, 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petri et al. (US Patent No. 6,114,298), hereinafter "Petri" in view of Lund et al. (US Patent No. 5,431,345), hereinafter "Lund".

Petri teaches the features as described above. Petri, however, fails to specifically disclose the microemulsion in a foam generating dispenser which includes a gas imparting mechanism to form the foam from air via an air injection piston, foam-generating aperture, a mesh or net, a pump, an additional mesh and/or sponge located slightly within, and/or at the tip of the nozzle, and a sprayer, and the foam to weight ratio as those recited.

Lund teaches a foam dispensing system that transforms spray droplets into a foamed spray via a foaming nozzle (see col. 1, lines 14-16) having a screen which has a plurality of screen openings having a mesh range from 30 to 60 openings per linear inch (see abstract) and produces a high quality foamed spray (see col. 3, lines 58-64). The means for producing a spray of droplets is preferably a manually-actuated pump sprayer placed in fluid communication with and attached to a container of foamable liquid, and the pump sprayer includes a spray discharge orifice having a diameter from about 0.40 mm to 0.80 mm (see col. 4, lines 51-56). The screens used in the present invention consist of a plurality of evenly or unevenly distributed openings of equal or dissimilar size, which can be circular, square or of any other shape, can be woven using any fabric-like material such as nylon, polyester, or any metallic materials such as steel, or can also be made of molded materials such as polyethylene or polypropylene or any other thermoplastic or thermoset, and these screens or combination of screens can be placed at any angle or orientation with respect to spray discharge orifice 118 (see col. 5, line 58 to col. 6, line 4). At least one screen is required to properly foam the liquid spray, however, multiple screens may be employed to perform the same task (see col. 5, lines 52-55). Bottle venting is accomplished when secondary piston 92 slides beyond a vent hole 90, allowing ambient air to replace the product that has been dispensed from container 30 (see col. 6, lines 40-43).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to package the microemulsion of Petri in the non-aerosol foam dispensing system of Lund because Petri teaches in col. 6, lines 23-44 that the

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microemulsions may be packaged in a variety of suitable detergent packaging known to those skilled in the art, and Lund teaches such dispenser which provides a high quality foamed spray, and to reasonably expect the foam to weight ratio to be within those recited because similar ingredients and dispensers have been utilized.

11. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Petri in view of Pritchett, **or** Petri in view of Lund, as applied to the above claims, and further in view of Loth.

Petri in view of Pritchett **or** Lund teach the features as described above. Petri in view of Pritchett **or** Lund, however, fails to disclose protomicroemulsion.

Loth, an analogous art teaches the features as described above. In particular, Loth teaches that the microemulsion can be prepared in concentrated form (see abstract; col. 1, lines 5-9), which concentrated form read on protomicroemulsion.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have prepared the microemulsion of Petri in concentrated form, or as a protomicroemulsion, because it is known from Loth that microemulsions can be prepared in concentrated form, which can be later diluted, for convenience in handling.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct

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from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1-2, 11-12 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 8 and 9 of U.S. Patent No. **7,402,554** in view of Lund.

US '544 teaches a similar foam-generating kit comprising a non-aerosol container having a foam-generating dispenser and a high surfactant microemulsion or protomicroemulsion having similar surfactant system concentration except for the dispenser having an additional mesh and/or sponge located slightly within, and/or at the tip of the nozzle.

Lund teaches the features as described above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the foam-generating dispenser of US '544 by incorporating therein a foaming nozzle having a screen because this would provide a high quality foamed spray as taught by Lund.

***Response to Arguments***

14. Applicants' arguments filed April 15, 2009 have been fully considered but they are not persuasive.

With respect to each of the rejections based upon Loth in view of Pritchett, Loth and Pritchett in view of Baeck, and Petri in view of Pritchett, Applicants argue that each of the combination of references fails to teach or suggest a mesh or sponge in or at the nozzle of the dispenser according to Applicants' claims.

The Examiner respectfully disagrees with the above arguments because the present claim 1 requires "a mesh and/or sponge located slightly within, and/or at the tip of the nozzle of said dispenser", and the secondary reference to Pritchett teaches that the nozzle **12** communicates with an inner axial downwardly open tube **11** which forms a top foamer unit housing, and fitting closely in tube **11** is a cylindrical plastic tube **81** having ultrasonically welded across its open ends a disk of coarse nylon mesh **82** (bottom end) and fine nylon mesh **83** (top end), (see col. 7, lines 35-45 and Figure 1 in Pritchett). It is clear from this teaching and Figure 1 that mesh **83** and mesh **82** are located at the top foamer unit housing which contains the nozzle, and mesh **83**, as seen in Figure 1 is in the interior passage of the nozzle.

With respect to the obviousness-type double patenting rejection based upon U.S. Patent No. 7,402,554, Applicants argue that a properly executed terminal disclaimer in compliance with 37 C.F.R. 3.73(b) was submitted to obviate the rejection.

The Examiner appreciates Applicants' intention of submitting a terminal disclaimer, however, the terminal disclaimer is missing from the submitted documents.

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Hence, the double patenting rejection as described in paragraph 13 above is maintained.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references are considered cumulative to or less material than those discussed above.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lorna M. Douyon whose telephone number is 571-272-1313. The examiner can normally be reached on Mondays-Fridays 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Lorna M Douyon/  
Primary Examiner, Art Unit 1796